SEOUENCE LISTING



<120 - INTEGRIN-LINKED KINASE AND ITS USES</p>

-:130 - FINE001CIP4

<1140 - 09/925,548</p> +:141 - 2001-08-08

<150 - 09/330,405</p> <:151 - 1999-09-03</p>

<150 - 09/035,706</p>

+:151 + 1998-03-05

<150 - 08/955,841</pre> +1151 + 1997 = 10 = 21

<150 - 08/752,343</p> <151 - 1996-11-19

<150 - €0/009,074</p> +:151 + 1996 - 12 - 21

 $\pm 1160 \pm 33$

+170 - FastSEO for Windows Version 4.0

 $\pm 3.10 \times 1$

R011 - 1089

H012 - DNA

+:013 / Home sapiens

-(400 + 1)

60 quatteatet qtequetqet accaegggag teecceggag aaggateetg cageeegagt 120 ocogaggata aaghttgggg theatested theoctggat cactecacag testcagget 174 toochaatee aggregactog gogoogggad gotgot atg gad gad att tid act day tgo dgg gay ggd aad gda gto god gtt dgo dtg tgg dtg gad aad 22.3 and dag san gan oth aan dag ggg gan gat dat ggd tto too boo btg 270 cae igg ged igd oga gag ggo ogd tot got gig git gag atg tig atd 318 Bur atg ogg ggg goa ogg ato aat gta atg aac ogt ggg gat gac acc occ 414 ong can only gow god agt can gga cap ogt gan att gna cag aag cha 462 ttg dag tad aag goa gab atd aat goa gtg aat gaa dab ggg aat gtg 516 pop ctg cac tat god tgt ttt tgg ggb baa gat baa gtg gba gag gab $5 \in \mathbb{R}$ etg jtg gea aat ggg gee ett gte age ate tgt aac aag tat gga gag $\mathfrak{H}(\mathbb{R}_{0})$ aty not gty gab aas goo aag goa ooo otg aga gag ott oto oga gag ogg you gay aad utg ggo bag aut oto aac ogt att oba tac aag gac $\hat{\sigma}$. 711 aba fito tigg aam gigg abb abb bgc abt bgg bbb bga aat giga abb btg and and calc tot ggo att gad the aga day off and the ofg abg ang 750 7 + oto sao gag aat dad tot gga gag ota tgg aag ggo ogo tgg bag ggo aat was att git; gitg aag gitg olig aag gitt oga gas igg agt asa agg 846 8 34 asy sgb agg gad tto aat gaa gag tgt ood ogg oto agg att tto tog cat that aat gig bid boa gitg bid ggt gob tgb bag tot boa bot gbt. 941

RECEIVE

MAY 1 4 2003

TECH CENTER 1600/2900

ent cat set act etc atc asa cad tgg atg deg tat gga tec etc tac 990 1638 ait gta cta cat gas ggo acc sat the gto gtg gad dag ago dag got g: g aag tit get titg gas atg gea agg gge atg gee tie eta eas aca 1086 o'a gag pod oto ato oba oga dat goa oto aat ago ogt agt gta atg art gat gag gab atg act goo oga att agb atg got gat gtb aag ttb 1. 30 the ten daw tigt bot ggt ogo atg tat goa oot god tigg gta god ood 127 gua got obg bag aag aag oot gaa gab aba aab aga bgb toa goa gab $1 \dots$ ang tigh agt tit goa guy bit oly tigg gaa buy guy aba bigg gag gua 1374 one tot got gad one too aat and gag and gga and aag ging goa the goa ggo obtlegg bot aborato oba oba ggt att too oot bat gtg tgt 1423 awy oth atg aag ato tgo atg aat gaa gao oot goa aag oga ood aaa 1470int gab atg att gtg oot ato ott gag aag atg bag gab aag. taggabtgga aggtoottgo otgaactoca gaggtgtogg gacatggttg ggggaatgca 157.1 ontopopaaa goagoaggoo totggttgoo tooocogoot ocagteatgg tactacecca 1632quotiggagto catecootto coccatecot accactgtgo geaagagggg egggeteaga 1692 1752 griftgicae tigocacaig gigiotocca acaigggagg galoagocco gootgicaca 1739 ataaagttta ttatgaaaaa aaaaaaaaaa aaaaaaa

<.110 < 111: 452</pre>

· I12 · PRT

13 - Homo sapiens

.400 - 2 Met Asp Asp Ile Fhe Thr Gln Cys Arg Glu Gly Asn Ala Val Ala Val Arg Leu Trp Leu Asp Asn Thr Glu Asn Asp Leu Asn Gln Gly Asp Asp 25 20° His Gly Phe Ser Ero Leu His Trp Ala Cys Arg Glu Gly Arg Ser Ala 40 35 Val Val Glu Met Leu Ile Met Arg Gly Ala Arg Ile Asn Val Met Asn 60 5.5 Arg Gly Asp Asp Thr Fro Leu His Leu Ala Ala Ser His Gly His Arg 75 70 Asp lle Val Gln Lys Leu Leu Gln Tyr Lys Ala Asp Ile Asn Ala Val 90 Asn Glu His Gly Asn Val Pro Leu His Tyr Ala Cys Phe Trp Gly Gln 110 105 1(0)Asp Gln Val Ala Glu Asp Leu Val Ala Asn Gly Ala Leu Val Ser Ile 120 115 Cys Asn Lys Tyr Gly Glu Met Fro Val Asp Lys Ala Lys Ala Fro Leu 140 135 Arg Glu Leu Leu Arg Glu Arg Ala Glu Lys Met Gly Gln Asr Leu Asn 150 155Ard The Pro Tyr Lys Asp Thr Phe Trp Lys Gly Thr Thr Ard Thr Ard 170 1.65 Fro Arg Ash Gly Thr Leu Ash Lys His Ser Gly Ile Asp Phe Lys Gln 185 $1 \cdot 0$ leu Ash Phe Leu Thr Lys Leu Ash Glu Ash His Ser Gly Glu Leu Trp 205 200 195Lys Gly Arg Trp Gln Gly Asn Asp Ile Val Val Lys Val Leu Lys Val 220 215 Arg Asp Trp Ser Thr Arg Lys Ser Arg Asp Phe Asn Glu Glu Cys Pro 235 230 _ _:5 Arg Leu Arg Ile Phe Ser His Pro Ash Val Leu Pro Val Leu Gly Ala 250 245

Tys Gln Ser Pro Pro Ala Pro His Pro Thr Leu Ile Thr His Trp Met 265



270

Pro Tyr Gly Ser Leu Tyr Asn Val Leu His Glu Gly Thr Asn Phe Va 275 280 285	ıl
Val Asr Gln Ser Gln Ala Val Lys Phe Ala Leu Asr Met Ala Arg Gl 190 295 300	- Υ
Met Ala Phe Leu His Thr Leu Glu Pro Leu Ile Pro Arg His Ala Le	eu 20
Asn Ser Arg Ser Val Met Ile Asp Glu Asp Met Thr Ala Arg Ile Se 325 330 335	
Mot Ala Asp Val Lys Phe Ser Phe Glr Cys Pro Gly Arg Met Tyr Al 340 345 350	.a
Pro Ala Trp Val Ala Pro Glu Ala Leu Glr. Lys Lys Pro Glu Asp Ti 355 360 365	ır
Ash Arg Arg Ser Ala Asp Met Trp Ser Phe Ala Val Leu Leu Trp Gl 370 375 380	Lu
Lou Val Thr Ang Glu Val Pro Phe Ala Asp Leu Ser Asr Met Glu II	le 00
Gly Met Lys Val Ala Leu Glu Gly Leu Arg Pro Thr Ile Pro Pro Gl 405 410 415	Ly
The Ser Pro His Val Cys Lys Leu Met Lys The Cys Met Asn Glu As 420 425 430	3p
Pro Ala Lys Arg Pro Lys Phe Asp Met Ile Val Pro Ile Leu Glu Ly 435 440 445	/S
Met Gln Asp Lys	
+1210 + 3	
+C11 × 19	
<pre>+C112 + DMA +C013 + Homo sapiens</pre>	
-400 - 3	19
ngtobatago agogtobog	19
- (210 + 4 - (211 + 18	
RECEIVE TO THE RECEIVE THE REC	
-(21) Homo sapiens	
-0400.4 - nboytgytag cagtogac	18
+010 × 5	
+1212 + DMA	
+C13+ Homo sapiens	
-4400 - 5 pottotoogg ggaaptood	19
+(2.2.0+m)	
-011 - 19	
-:212 - LMA -:213 - Homo sapiens	
-:⊈00 + 6	
engractogg gotgoagga	19

<210 - 7

-0:11:- 19 -0:11:- DNA -0:11:- Homo	sapiens
H400+7 Jotinatios	cg@gactcg
-(210 + 8 -(211 + 20 -(211 + DMA -(213 + Bimb)	sariens
<400 + 8 qqqaagqagg	atgaaccc
+0010 + 9 +0011 + 19 +0012 + DNA +0012 + Romo	sariens
(400 × 9 gaptgaggas	tgt ggagtg
<pre>#010 - 10 #011 - 18 #010 - DUA #0213 - Homo</pre>	sar iens
<pre><400 - 10 ingraaghet</pre>	gaggactg
0010 + 11 0011 + 19 0010 + DNA 0013 + Homb	saŗ i ens
4400% 11 gagtqaaaat	gtogtocat
+016 + 12 +011 + 19 +011 + DNA +013 + Homo	sapiens
k400 12 aacggcgact	gcgttgccc
-0.10 - 15 -0.11 - 14 -0.12 - DNA -0.213 - Homo	sapiens
+4000+13 tgttqtccag	ccacaggcg
+00100+ 14 +00100+ 19 +00100+ DNA	
KL150/ Hcmo	sapiens

<pre>-:400+ 14</pre>	19
-U10 - 15 -U11 - 14 -U11 - TMA -U13 - Homo sapiens	
-0400 - 15 - фаадроатga togtococo	19
+0210 + 16 +0311 + 10 +0312 + DMA +0313 * Homo sapiens	
<pre>%400 + 16 @sqgpobsgt gcaaggggg</pre>	19
HOLD + 17 HOLD + 14 HOLD + Homo sapiens	
-0400 - 17 oggadateta ggdaggood	19
+0010 + 18 +011 + 10 +012 + 00A +013 + Humo sapiens	
<pre><400 - 18 chabaghaga goggoodte</pre>	1 ⁹
<pre>%C10 + 19 %C11 + 19 %C12 + DMA %C13 + Home sapiens</pre>	
-0400 - 10 Dogostyato aacatoto	18
+(110 + 20 +(111 + 1) +(111 + 11A +(113 + Homo sapiens	
Higatogetg occoogs	18
+0.100+ 01 +0.10+ 19 +0.10+ EMA +0.130+ Homo sapiens	
<pre><40001 catecogacg gttcattac</pre>	19

+ 010% 0. + 011% 1. + 010% LMA + 010% Homo	sapiens	
-400: L. uggagtarca	tccccacgg	19
+ 3100+ 73 + 3110+ 13 + 2130+ EMA + 3130+ Homo	sapiens	
-400 + 23 ggotgodaga	tgcagggg	19
- 210 - 24 - 211 - 19 - 212 - BNA - 213 - Homo	sapiens	
+400 + 24 atatbabygt	gtccatgac	19
+ 210 × 25 + 211 × 19 + 212 + DNA + 213 × Homo	sariens	
-4005 Gotgoaatag	ottotgtad	19
+ 010 + 06 + 011 + 19 + 010 + DNA + 013 + Bomb	sapiens	
/400 / 26 captypatty	atgtetgee	19
+ 110 % 07 + 111 % 10 + 112 % 1NA + 113 % Hamb	sariens	
-400 - j/ gggadacatt	congtigtts	19
+210 + 1% +211 + 19 +212 + 2MA +213 + Bomb	sapiens	
-1400 + 115 nda 48a4 dag	gcatagtgc	19
<pre><210 + 23</pre> <pre><211 < 13</pre>		



-00105 DNA -00135 Homo	sapiens	
-40 +	cttggcccc	19
+ 1110 + 30 + 1111 + 10 + 1111 + 111A + 1113 + Homp	sapiens	
-400 - 30 cattitgh:ab	caggtosto	19
+ 010 + 31 + 011 + 19 + 010 + EMA + 013 + Hemo	sapiens	
+400+31 agatgotgas	aagggcccc	19
+210 + 32 +211 + 19 +313 + BOMo	sapiens	
+400 + 31 atototocat	acttyttac	19
-110-03 -111-19 -110-EMA -113-Eomo	sapiens	
<pre>+400 + 33 antigotity</pre>	tocacaggo	19
<pre>#310 + 34 +311 + 19 +311 + PMA +313 + Homo</pre>	sapiens	
- 400 - 34 augusetate	agggqtgce	19
-010 - 35 -011 - 19 -010 - DNA -013 - Homo	sapiens	
+400 + 35 tutotgonog	ctctcggag	19
+ 210 + 36 + 211 + 19 + 212 + ENA + 212 + Homo	sapiens	

oggittga rat	tetggecea	1
<pre><210 + 37 <211 + 13 <211 + 13 <2113 + FMA <2113 + Homp</pre>	sapiens	
-0400 + 30 -44415t you	cttgtatgg	13
0010 + 3+ 0011 + 14 0012 + PVA 0013 + Homo	sapiens	
ki400 ki 3± gtgogggtgg	toccottoc	19
0010 + 99 0011 + 19 0010 + DMA 0013 + Homo	sapiens	
-(400 + 39 - одинеская	tgcgggtgg	19
+210 + 40 +221 + 19 +241 + DNA +241 + Hemb	sapiens	
(400 - 40 प्रभूक्षिक्षम्	teggggeeg	19
+0.10 + 41 +0.11 + 19 +0.12 + 00A		
-1111 Homo	sapiens	
<pre><400 < 41 stajagtgtt</pre>	tgttcaggg	19
<pre> 0.10 + 42 0.211 + 13 0.212 + DMA 0.213 + Homo</pre>	sapiens	
+14.0 et = 4.7		
agttaaghtg	tttgaagtc	19
+0110+43 +0110+19 +0110+DNA		
+12130+ H+mo	sapiens	
<pre><40000 43 ctcgttgage</pre>	ttcgtcagg	19

<pre><0108 44 +0.111 + 19 +0.113 + 10A +0.113 + Homo</pre>	sapiens	
0400 - 44 todahayoto	tocagagtg	19
+1210 + 45 +1211 + 10 +1312 + 141A +1213 + Homb	sapiens	
0400 + 45 resetgebar	eggesette	19
+1210 + 44 +1211 + 19 +1212 + DNA +1213 + Home	sapiens	
k:400 - 46 gbabbtt bab	gacaatgtc	19
+0010 + 47 +0011 + 19 +0010 + 001A +0013 + Homo	sapiens	
(400 - 47 aptomagnet	cgaaccttc	19
+0010 45 +0010 + 19 +0010 + FMA +0015 + Home	sapiens	
0400+45 aagtoootge	tcttccttg	19
+0010 + 49 +0011 + 10 +0012 + FOIA		
-:215 - Homb -:400 - 44	sapiens	
нооууддаса +2210.+ 50	ctcttcattg	20
+0111+19 +0110+FNA +0110+F0MO	earione	
-1400: 50		1.0
#2109 51 +2119 13 +2129 DNA	gggacactc	19

	, saprens	
×410×51 449 monto	. ggatgcgag	1
-210 - 50 -211 - 13 -210 - MA -213 - Home	sapiens	
- 400 - 50 ggcaggnadi	: tagcactgg	15
+ 210 + 53 + 211 + 13 + 212 + 184A + 213 + Home	sapiens	
+400 + 53 atgaygayda	ggtggagac	19
+210 + 54 +311 + 19 +313 + EUA +313 + Eomo	sapiens	
+400 + 54 agtgtgtgat	gagagtagg	19
+ 010 + 55 + 010 + 10 + 010 + FMA + 013 + Homo	sapiens	
9400 - 59 agggatosat	acggcatcc	19
+210 × 50 +211 + 19 +212 × INIA +213 + Himo	sapiens	
+400 + 56 *tcatgtagt	acattgtag	19
- 220 - 57 - 221 - 19 - 212 - EMA - 213 - Homo	sapiens	
- 400 - 57 chan jad jaa	attggtgcc	19
+ 217 + 58 dull + 19 + 217 + EWA + 217 + Homo	sapiens	
<4(U + 5o		

tteacardet	ggetetggt	19
- 21 × 53 - 211 - 13 - 212 - 131A		
· 11 · · Homo	sapiens	
-400-54 5:0:4tg*00	aaagcaaac	19
- 210 + 66 - 211 + 19 - 212 - 184		
-713 - Homo	sapiens	
-400 - 60 gtajjaaggo	catgecoot	19
+ 210 + 61 + 211 + 19 + 212 + 50A		
+213 + Hamo	pabieus	
+400 + F1 atgagguget	ctagtgtgt	19
+ 210 + 62 + 11 + 19 + 213 + BCA + 213 + Bomo	sapiens	
+400 + 82		
attgagt roa	tgtcgtggg	19
+ 010 + 63 + 011 + 13 + 010 + 5MA + 013 + Homo	sapiens	
+400+63		
raateattad (actacggct	19
+ 010 + 64 + 211 + 13 + 010 + DNA + 013 + Himber	sapiens	
- 400 - 64	•	
ttodageagt (catgteete	19
+ 210 + 65 + 211 + 19 + 217 + EWA		
+010 + Homo s	sapiens	
+400 - (5 aachtgabat c	nadonatido	10
+.210 × 66	ougosa ego	19
00		

- 221 - 1 tIA - 221 - 1 tIA	sapiens
od(se ee andagahat	tggaaagag
+ 210 + 60 + 211 + 19 + 212 + 20A	
+21% + Hemo +400 + 67	sapiens
adgragdigs +210 + 68 +211 + 14	atacatgcg
+ 0113 + DMA + 013 + Hemo	sapiens
- 400 + 65 eggangetas	ccaggcagg
+210 + 69 +211 + 19 +212 + DMA	
+ 213 + Homo + 400 + 69 = againtligg	
+110 + 70 +211 + 14	99900000
+010 + LMA +013 + Homo	sapiens
+400 + 70 glottcaggo	ttcttctgc
+.10+71 +011+19 +011+FNA	
+213 + Homo +400 + 71 totgotgago	-
+ 0.10 + 7.0 + 0.11 + 20	gidigittg
11. ENIA	sapiens
+400 + 7.5 uda mgcaaa	actccacatg
10 + 7: - 11 + 1: - 11 + ENA	
4213 / H.mo .	sapiens

itgr am ag	ttcccacag	1 3
- 010 + 04 - 011 + 19 - 010 + ENA - 01: - Homp	sapiens	
 430 + 74 44gt acched 	cgtgtcacc	19
+ 210 + 25 + 211 + 19 + 217 + PHA	cariona	
+21% Homo +400 + 75 +catattyga		19
+310 + 76 +311 + 19		+ 2
+212 + EMA +213 + Ebmo +400 + 76	sariens	
adacticoaa -210 - 77	tgccacctt	19
+011 + 19 +012 + EUA +013 + Homo	sapiens	
-400-77 untqigatgg	taggeegaa	19
+210 + 78 +211 + 19 +210 + IMA +213 + Homo	saciens	
k 400 × 73 Gadatgaqgg		19
+:110 / 79 +:111 + 19 +:111 + ENIA +:113 + Homo	sapiens	
k 400 + 7± cat scagato	ttcatgage	19
+010 + 80 +011 + 19 +011 + DMA +013 + Homo	sapiens	
+10.+ 8ā ⇔ggiugatti	gcagggtct	19

-:40 15 73

+ 0100 91 + 011 + 10 + 010 + 00A + 010 + Homo	o sapiens	
400 %1 qqatagqitac	: aatcatgtc	1 3
+ 010 + 80 + 011 + 10 + 010 + 00A + 013 + Homo	sapiens	
-400 - 82 acttythetg	catcttete	19
+010 + 83 +011 + 19 +010 + 00A +013 + Homo	carione	
+ 400 + 83	saptens	
	ttccagtcc	19
8010 + 84 + 011 + 15 + 010 + 50A		
+ 113 + Homo + 400 + 24	sapiens	
	ctggagttc	19
7210 + 85 7221 + 19 7217 + DNA		
+213+ Homo	sapiens	
+400 + 35 gigraticoo	ccaaccatg	19
+ 010 + 50 + 211 + 18 + 210 + 30A + 013 + Homo	ganions	
+ 400 + 56	Sapieno	
yggamgatgo	attoccc	18
7010 + 87 - 711 + 20 - 712 + LNA		
+ 213 - Homo	sapiens	
+400 + 87 ggaatgatga	tttggggagg	20
+210 + 88		

<212> DNA <213> Homo	sapiens	
<40)> 8- (caucca (ag	goetgetge	
-21 (8 8 + -2116 1 + -2116 TMA2013 H - mo	sapiens	
ा40 (१८ - १ पुरुषकार्याद्यम् रहिद्	gaggsaacs	
-(210)- 90 -(211)- 19 -(21)- 00A -(21)- Homo	sapiens	
o40at daetgg ocatdaetgg	a ggoggggg	
+00160+ *1 +00110+ 1.4 +001.0+ 001A +001+0+ Homo	sapiens	
-(4000- 91 Ingiracindoa	ggatggggt	
0001700 %2 0001110 000 0001000 100A 0001100 Homo	sapiens	
ा40 ०० ४. जववृत्वब्द्धक्रिक्ट	gatggaccc	
HU100 - FY HU110 - U0 HU100 - DNA HU130 - Hump	sapiens	
:40 :65 jqtaqgqatj	ggggaagggg	
+00100+004 00110+00+ +0010+00MA +0010+00MA	sapiens	
-(400)- 54	ttgcgcacag	
01.100- +f 01.110- 1- 01.110- DNA		
-1213: Homo	sapiens	

::40 IN 35 pat ::gagdo	cgcccctc	18
0210 + 96 0211 + 00 0213 + DNA 0213 + Homo	sapiens	
H400 + 196 Jacancatgt	ggcaagtgac	20
+0010 + 47 +0011 + 10 +0010 + DMA +0010 + Homo	sapiens	
<pre><400 ← 97 gotgateset</pre>	cccatgttgg	20
+210 × 95 +211 + 19 +212 + DNA +213 + Hamo	sapiens	
<400.5 % ggcggggastg	atccetccc	19
+00100+ 949 +00110+ 19 +00100+ PMA +00110+ Homo	sapiens	
<pre></pre> <pre></pre> <pre></pre> <pre>taataaactt</pre>	tattgtgac	19